

Claims

[c1] What is claimed is:

1. An adjusting device provided on a transmission belt to adjust the tension of the transmission belt, the device comprising:
a housing;
a fastener fixed on the housing, the fastener engaging the transmission belt so that there is no relative displacement between the fastener and the transmission belt;
a sliding mechanism disposed on the housing and capable of sliding in a linear direction on the housing, the sliding mechanism engaging the transmission belt so that there is no relative displacement between the sliding mechanism and the transmission belt; and
an elastic device fixed to the housing at a first end and fixed to the sliding mechanism at a second end for maintaining proper tension in the transmission belt.

[c2] 2. The device of claim 1 wherein a sliding track is disposed on a surface of the housing, and the sliding mechanism is capable of sliding along the sliding track.

[c3] 3. The device of claim 2 wherein a path of the sliding

track is parallel with a linear direction in which the transmission belt moves.

- [c4] 4.The device of claim 1 wherein the elastic device is a helical spring.
- [c5] 5.The device of claim 1 wherein the first end of the elastic device is fixed to a retaining post disposed on the housing.
- [c6] 6.The device of claim 5 wherein the elastic device urges the sliding mechanism towards the retaining post for maintaining proper tension in the transmission belt.
- [c7] 7.The device of claim 1 wherein the adjusting device is a carriage of a scanning device, and the transmission belt moves the carriage in a linear path for scanning documents.
- [c8] 8.The device of claim 1 wherein the transmission belt is a timing belt.